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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,440	06/10/2005	Tomoyasu Yamada	082416-001100US	3888

20350 7590 09/14/2006

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EXAMINER

BERHANE, ADOLF D

ART UNIT PAPER NUMBER

2838

DATE MAILED: 09/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/538,440	YAMADA ET AL.	
	Examiner	Art Unit	
	Adolf Berhane	2838	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3-5 and 7 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 6, 8 and 9-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1, 2, 6, 8 and 9-12 are rejected under 35 U.S.C. 102(a) as being anticipated by Applicant's admitted prior art.

Applicant's admitted prior art Fig. 11 discloses a power supply device with a charging section and operation control section. A charging section (3-6) which is actuated to charge a charging element (6), a direct-current voltage generation section (8-13) which generates a second direct-current voltage based on a first direct-current voltage of the charging element (6) and applies the generated second direct-current voltage to a load (L) and an operation control section (14 and 15) which actuates the charging section (3-6), determines whether a state of the load (L) to which the direct-current voltage generation section (8-13) applies the second direct-current voltage is a lightly loaded state or not and in case where determining that the load (L) enters a lightly loaded state, controls the charging section (3-6) to stop operation of charging the charging element (6) when a preset time period elapses after it determines that the load (L) enters the lightly loaded state.

Allowable Subject Matter

3. Claims 3-5 and 7 are allowed over the cited prior art.

Response to Arguments

4. Applicant's arguments filed 7/25/06 have been fully considered but they are not persuasive. Applicant argues that Applicant's description Figure 11 fails to include any description of an operation control section that determines a lightly loaded state and stops operation of charging element when a preset time period elapses after it determines that the load enters the lightly loaded state. Applicant's attention is directed to Applicant's Specification, at page 4, lines 11-18 "For example, if the load 16 decreases to under a predetermined value at a time t_1 , the duty ratio of the control signal is changed. The load state detection circuit 14 detects the state of the load 16 from the duty ratio, and generates, for example, a signal S14 having a low level (hereinafter referred to as "L") in a *time period* in which the load 16 is light. In the *time period* in which the signal S14 of "L" is generated, the control signal to be supplied from the PFC section control circuit 7 to the NMOS 4 is controlled at "L" by the PFC on/off switching circuit 15 thereby the *power factor improvement circuit is stopped*". In other words, after a preset time period has elapses the stops operation of charging a charging element. As Examiner had pointed out the previous Office Action the reason of allowance should be a power supply device with an output timing section which, when the load state detection section outputs a determination signal representing that the load enters a lightly loaded state, sets a timing counted from when the determination signal is output and outputs the timing and an operation stopping section which controls the charging section to stop the operation of charging the charging element when the

output timing setting section outputs a determination signal representing that the load enters a lightly loaded state.

Conclusion

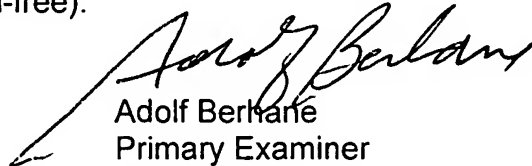
5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adolf Berhane whose telephone number is 571-272-2077. The examiner can normally be reached on Monday- Friday 8 AM to 6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Karl Easthom can be reached on 571-272-1989. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Adolf Bernhart
Primary Examiner
Art Unit 2838